

It is interesting to note the diversity of mistletoes and their hosts within a small area at the Murchison River site. Published records of mistletoe hosts appear to be scant and it is probable that many new records will be made, especially in Western Australia. I would like to thank Messrs. P. G. Wilson, B. R. Maslin and M. E. Trudgen (W.A. Herbarium, PERTH) for assistance in plant identification.

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Sperm storage in *Moloch horridus*.—A female Mountain Devil, *Moloch horridus*, found just north of Carnarvon, was given into my care at the beginning of November 1978. The lizard was allowed the freedom of the whole of my fenced paddock, but preferred to stay in one restricted area. Here it could be seen every day, feeding on ants.

On November 7 it started excavating a burrow into which it laid eggs.

On January 11, 1979 it was seen digging again, about 10 metres from the first burrow. Through mischance this second burrow was destroyed by garden work on March 9. It then contained three eggs. One of these was dried; the second was severely damaged; the third appeared to have been attacked very recently by small white worms which had killed the well-developed embryo. This egg was preserved in alcohol. Reports of a double clutch in *Moloch* appear to be rare; it was recorded only once by C. C. Sporn in his detailed studies of the breeding of captive Mountain Devils (*W. Aust. Nat.*, 9 (7), 1965: 157).

The first burrow was opened up after three months and found to contain nine dried up eggs.

The lizard disappeared soon after its burrow was destroyed, but possibly may still be at large in my garden.

As there was no male *Moloch* in my garden it was evident that the female had been able to store sperm over a considerable period.

This phenomenon of sperm storage has been recorded in reptiles but, as far as I know, not hitherto in *Moloch*. I am indebted to Dr G. M. Storr, of the Western Australian Museum, for providing the following summary by Dr A. Bellairs (*The Life of Reptiles*, Weidenfeld & Nelson, London, 1969, vol. 2, p. 419): "It has been known for some years that in certain species of turtles, snakes and lizards the sperm can live in the genital tract of the female for long periods. It is therefore possible for a reptile to produce successive clutches of fertile eggs, usually diminishing progressively in number, after a single insemination. Sperm from an autumn mating can therefore be used for fertilising the eggs in the following spring. Sperm survival for several months is probably quite a common occurrence. There are instances, however, where living spermatozoa have been recovered from the oviducts, or fertile eggs have been laid by isolated female captives after much longer periods: 4 years in the case of a diamondback terrapin (*Malaclemys centrata*) and a box tortoise (*Terrapene carolina*), 4½ years in an indigo snake (*Drymarchon corais*) and 6 years in another colubrid, *Leptodeira*."

There may be a biological advantage in the capacity to store sperm in this species. Though conspicuous enough when met with in the bush, Mountain Devils are not very often encountered, and almost always as solitary, slow-moving individuals. Thus on a trip in the middle of November 1978, from Leonora to the Warburton Range and back, a total distance of some 1,450 km, driving slowly (in a landrover towing a caravan) during daylight and closely observing the road, I saw only four widely separated individuals. Possibly males and females may find each other only occasionally; therefore a capability for sperm storage may compensate for infrequent opportunities of mating.

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